GenCore version 5.1.3

OM protein - nucleic search, using frame_plus_p2n model

Run on: January 16, 2003, 19:51:22 ; Search time 81.8571 Seconds
(without alignments)
137.557 Million cell updates/sec

Title: US-09-856-070-26
Perfect score: 28
Sequence: 1 QDYFF 5

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Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS human40.cdi
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-WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
c 1	28	100.0	89	22	ABA70134	Human foetal liver
c 2	28	100.0	89	22	ABA36941	Probe #18380 for g
c 3	28	100.0	89	22	AAK18351	Human brain expres
c 4	28	100.0	89	22	AAK44252	Human bone marrow
c 5	28	100.0	89	22	AAI50256	Probe #18942 used
c 6	28	100.0	89	24	ABS18487	Human genome-deriv
c 7	28	100.0	121	24	ABK25861	Albino plant produ
8	28	100.0	121	24	ABK25862	Albino plant produ
c 9	28	100.0	133	22	AAK50420	Human bone marrow
c 10	28	100.0	160	22	ABA26312	Soy bean SCN/SCS r
11	28	100.0	288	21	AAF10649	Fusarium venenatum
12	28	100.0	300	20	AAX98493	Human cancer cell
13	28	100.0	301	22	AAK66441	Human immune/haema
14	28	100.0	328	22	AAK55628	Human immune/haema
c 15	28	100.0	472	24	ABN19602	Human ORFX polynuc
c 16	28	100.0	401	22	AAK96375	Human neuregulin q
c 17	28	100.0	401	22	AAF97868	Human neuregulin q
18	28	100.0	413	24	ABL77803	Human ovarian canc
c 19	28	100.0	434	24	ABQ57717	Human colon cancer
20	28	100.0	441	24	ABN96735	Gene #3233 used to
c 21	28	100.0	470	22	ABA57510	Human foetal liver
c 22	28	100.0	470	22	ABA26994	Probe #9460 for ge
c 23	28	100.0	470	22	AAK05554	Human brain expres
c 24	28	100.0	470	22	AAK31158	Human bone marrow
c 25	28	100.0	470	22	AAI37064	Probe #5750 used t
c 26	28	100.0	470	24	ABS05909	Human genome-deriv
27	28	100.0	488	21	AAC03930	Human secreted pro
c 28	28	100.0	506	21	AAC98652	Human colon cancer
c 29	28	100.0	517	22	AAK37550	Human bone marrow
30	28	100.0	554	22	ABA64012	Human foetal liver
31	28	100.0	554	22	AAK38222	Human bone marrow
32	28	100.0	554	22	AAI44150	Probe #12836 used
c 33	28	100.0	556	24	ABN18003	Human ORFX polynuc
34	28	100.0	605	22	ABA06264	Soy bean SCN/SCS r
35	28	100.0	605	22	ABA06401	Soy bean SCN/SCS r
36	28	100.0	611	21	AAZ51575	Haematobia irritan
37	28	100.0	620	22	AAS05615	Mammalian vestibul
38	28	100.0	631	21	AAZ51576	Haematobia irritan
39	28	100.0	639	22	ABA06280	Soy bean SCN/SCS r
40	28	100.0	639	22	ABA06307	Soy bean SCN/SCS r
41	28	100.0	647	22	AAS46194	Human DNA encoding
c 42	28	100.0	700	22	AAH93224	Human inflammatory
c 43	28	100.0	700	22	AAH93225	Human inflammatory
44	28	100.0	751	20	AAX98906	Human validated ca
c 45	28	100.0	760	21	AAA16654	Human secreted pro

ALIGNMENTS

RESULT 1
ABA70134/c
ID ABA70134 standard; DNA; 89 BP.
XX
AC ABA70134;
XX
DT 01-FEB-2002 (first entry)
XX
DE Human foetal liver single exon nucleic acid probe #18439.
XX
KW Human, foetal liver, gene expression, single exon nucleic acid probe; ss.
XX
OS Homo sapiens.
XX
PN WO200157277-A2.
XX
PD 09-AUG-2001.
XX

```
PF   30-JAN-2001; 2001WO-US00669.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483447/52.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human fetal liver -
XX
PS   Claim 4; SEQ ID NO 18439; 639pp + sequence listing; English.
XX
CC   The invention relates to a single exon nucleic acid probe for
CC   measuring human gene expression in a sample derived from human foetal
CC   liver. The single exon nucleic acid probes may be used for predicting,
CC   measuring and displaying gene expression in samples derived from human
CC   fetal liver. The present sequence is a single exon nucleic acid
CC   probe of the invention.
CC   Note: The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 89 BP; 22 A; 21 C; 16 G; 30 T; 0 other;

Alignment Scores:
Pred. No.:                104             Length:         89
Score:                    28.00           Matches:        5
Percent Similarity:       100.00%         Conservative:   0
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Query Match:              100.00%         Indels:         0
DB:                       22              Gaps:           0

US-09-856-070-26 (1-5) x ABA70134 (1-89)

Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||
Db      36 CAACATTATGAAGAC 22

RESULT 2
ABA36914/c
ID   ABA36914 standard; DNA; 89 BP.
XX
AC   ABA36914;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Probe #15380 for gene expression analysis in human heart cell sample.
XX
KW   Human; gene expression, heart, microarray, vascular system, probe;
KW   cardiovascular disease; hypertension; cardiac arrhythmia;
KW   congenital heart disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157274-A2.
XX
PD   09 AUG-2001.
XX
PF   30 JAN-2001; 2001WO-US00666.
XX
PR   04 FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03 AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488899/53.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   hearts -
XX
PS   Claim 4; SEQ ID No 15380; 530pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes for
CC   measuring human gene expression in a sample derived from human heart. The
CC   present sequence is one such probe. The probes may be used for
CC   predicting, measuring and displaying gene expression in samples derived
CC   from the human heart via microarrays. By measuring gene expression, the
CC   probes are useful for predicting, diagnosing, grading, staging,
CC   monitoring and prognosing diseases of the human heart and vascular system
CC   e.g. cardiovascular disease, hypertension, cardiac arrhythmias and
CC   congenital heart disease.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 89 BP; 22 A; 21 C; 16 G; 30 T; 0 other;

Alignment Scores:
Pred. No.:                104             Length:         89
Score:                    28.00           Matches:        5
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       22              Gaps:           0

US-09-856-070-26 (1-5) x ABA36914 (1-89)

Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||
Db      36 CAAGATTATGAAGAG 22

RESULT 3
AAK18351/c
ID   AAK18351 standard; DNA; 89 BP.
XX
AC   AAK18351;
XX
DT   05-NOV-2001  (first entry)
XX
DE   Human brain expressed single exon probe SEQ ID NO: 18342.
XX
KW   Human; brain expressed exon; gene expression analysis; probe;
KW   microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
KW   epilepsy; cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157275-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00667.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03 AUG 2000; 2000US-0632366.
PR   21 SEP 2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
```

XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488446/52.
XX
PT Single exon nucleic acid probes for analyzing gene expression in human
PT brains -
XX
PS Example 4; SEQ ID NO: 18342; 650pp - Sequence Listing; English.
XX
CC The present invention provides a number of single exon nucleic acid
CC probes which are derived from genomic sequences expressed in the human
CC brain. They can be used to measure gene expression in brain cell samples,
CC which may enable the diagnosis and improved treatment of nervous system
CC diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC epilepsy and cancers. The present sequence is one of the probes of the
CC invention.
XX
SQ Sequence 89 BP; 22 A; 21 C; 16 G; 30 T; 0 other;

Alignment Scores:

Pred. No.:	104	Length:	89
Score:	28.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	22	Gaps:	0

US-09-856-070-26 (1-5) x AAK18351 (1-89)

```
Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||
Db      36 CAAGATTATGAAGAG 22
```

RESULT 4
AAK44252/c
ID AAK44252 standard; DNA; 89 BP.
XX
AC AAK44252;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human bone marrow expressed single exon probe SEQ ID NO: 18809.
XX
KW Human; bone marrow expressed exon; gene expression analysis; probe;
KW microarray, cancer, leukaemia, lymphoma, myeloma, ss
XX
OS Homo sapiens.
XX
PN WO200157276-A2
XX
PD 09-AUG-2001
XX
PF 30-JAN-2001; 2001WO-US00668.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488900/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for
PT analyzing gene expression in human bone marrow
XX
PS Example 4; SEQ ID NO: 18809; 658pp - Sequence Listing; English.
XX
CC The present invention provides a number of single exon nucleic acid
CC probes which are derived from genomic sequences expressed in the human
CC bone marrow. They can be used to measure gene expression in bone marrow
CC samples, which may enable the improved diagnosis and treatment of cancers
CC such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC the probes of the invention.
XX
SQ Sequence 89 BP; 22 A; 21 C; 16 G; 30 T; 0 other;

Alignment Scores:

Pred. No.:	104	Length:	89
Score:	28.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	22	Gaps:	0

US-09-856-070-26 (1-5) x AAK44252 (1-89)

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Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||
Db      36 CAAGATTATGAAGAG 22
```

RESULT 5
AAI50256/c
ID AAI50256 standard; DNA; 89 BP.
XX
AC AAI50256;
XX
DT 17-OCT-2001 (first entry)
XX
DE Probe #18942 used to measure gene expression in human placenta sample.
XX
KW Probe; microarray, human, placenta, antenatal diagnosis;
KW genetic disorder; ss.
XX
OS Homo sapiens.
XX
PN WO200157272-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US00663.
XX
PR 04-FEB-2000; 2000US-0180312.
PR 26-MAY-2000; 2000US-0207456.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-0234687.
PR 27-SEP-2000; 2000US-0236359.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488897/53.
XX
PT Human genome derived single exon nucleic acid probes useful for
PT analyzing gene expression in human placenta -
XX
PS Claim 25; SEQ ID No 18942; 654pp; English.
XX
CC The present invention relates to single exon nucleic acid probes (SENP).
CC The present sequence is one such probe. The probes are useful for
CC producing a microarray for predicting, measuring and displaying gene
CC expression in samples derived from human placenta. The probes are useful
CC for antenatal diagnosis of human genetic disorders.
XX
SQ Sequence 89 BP; 22 A; 21 C; 16 G; 30 T; 0 other;

Alignment Scores:

Pred. No.:	104	Length:	89
Score:	28.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	22	Gaps:	0

US-09-856-070-26 (1-5) x AA150256 (1-89)

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Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||||
Db      36 CAAGATTATGAAGAG 22
```

RESULT 6
ABS18487/c
ID ABS18487 standard; DNA; 89 BP.
XX
AC ABS18487;
XX
DT 19-AUG-2002 (first entry)
XX
DE Human genome-derived single exon probe ORF from lung SEQ ID No 18478.
XX
KW Human; ds; single exon probe; asthma; lung cancer; COPD; ILD;
KW chronic obstructive pulmonary disease; interstitial lung disease;
KW familial idiopathic pulmonary fibrosis; neurofibromatosis;
KW tuberous sclerosis; Gaucher's disease; Niemann Pick disease;
KW Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;
KW pulmonary histiocytosis; lymphangioleiomyomatosis; Karagener syndrome;
KW pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
KW primary ciliary dyskinesis; pulmonary hypertension;
KW hyaline membrane disease; open reading frame; ORF.
XX
OS Homo sapiens.
XX
PN WO200186003-A2.
XX
PD 15-NOV-2001.
XX
PF 30-JAN-2001; 2001WO-US00665.
XX
PR 04-FEB-2000; 2000US-180312P.
PR 26-MAY-2000; 2000US-207456P.
PR 30-JUN-2000; 2000US-0608408.
PR 03-AUG-2000; 2000US-0632366.
PR 21-SEP-2000; 2000US-234687P.
PR 27-SEP-2000; 2000US-235259P.
PR 04-OCT-2000; 2000GB-0024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG; Hanzel DK; Chen W; Rank DR;
XX
DR WPI; 2002-114183/15.
XX
PT Spatially addressable set of single exon nucleic acid probes, used t
PT measure gene expression in human lung samples -
XX
PS Claim 4; SEQ ID No 18478; 634pp; English.
XX
CC The invention relates to a spatially addressable set of single exon
CC nucleic acid probes for measuring gene expression in a sample derived
CC from human lung comprising single exon nucleic acid probes having one of
CC 12614 nucleic acid sequences mentioned in the specification, or their
CC complements or the 12487 open reading frames derived from the 12614
CC probes. Also included are a microarray comprising the novel set of
CC probes; the novel set of probes which hybridise at high stringency to a
CC nucleic acid expressed in the human lung; measuring gene expression in a
CC sample derived from human lung, comprising (a) contacting the array with
CC a collection of detectably labeled nucleic acids derived from human lung
CC mRNA, and (b) measuring the label detectably bound to each probe of
CC the array; identifying exons in a eukaryotic genome, comprising
CC (a) algorithmically predicting at least one exon from genomic sequences
CC of the eukaryote, and (b) detecting specific hybridisation of detectably
CC labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
CC having a fragment identical to the predicted exon, the probe is included
CC in the above mentioned microarray; assigning exons to a single gene,
CC comprising (a) identifying exons from genomic sequence by the method
CC above and (b) measuring the expression of each of the exons in several
CC tissues and/or cell types using hybridisation to a single exon
CC microarrays having a probe with the exon, where a common pattern of
CC expression of the exons in the tissues and/or cell types indicates that
CC the exons should be assigned to a single gene; a peptide comprising one
CC of 12011 sequences, mentioned in the specification, or encoded by the
CC probes/open reading frames (ORF). The probes are used for gene
CC expression analysis, and for identifying exons in a gene, particularly
CC using human lung derived mRNA and for the study of lung diseases
CC such as asthma, lung cancer, chronic obstructive pulmonary disease
CC (COPD), interstitial lung disease (ILD), familial idiopathic pulmonary
CC fibrosis, neurofibromatosis, tuberous sclerosis, Gaucher's disease,
CC Niemann-Pick disease, Hermansky-Pudlak syndrome, sarcoidosis, pulmonary
CC haemosiderosis, pulmonary histiocytosis, lymphangioleiomyomatosis,
CC pulmonary alveolar proteinosis, Karagener syndrome, fibrocystic
CC pulmonary dysplasia, primary ciliary dyskinesis, pulmonary hypertension
CC and hyaline membrane disease. The present sequence is a single exon
CC probe open reading frame of the invention.
CC Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic
CC format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 89 BP; 22 A; 21 C; 16 G; 30 T; 0 other;

Alignment Scores:

Pred. No.:	104	Length:	89
Score:	28.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	24	Gaps:	0

US-09-856-070-26 (1-5) x ABS18487 (1-89)

```
Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||||
Db      36 CAAGATTATGAAGAG 22
```

RESULT 7
ABK25861/c
ID ABK25861 standard; DNA; 121 BP.
XX
AC ABK25861;
XX
DT 09-APR-2002 (first entry)
XX
DE Albino plant producing genome altering oligonucleotide #33.
XX
KW Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
KW 5 methyl modification; LNA modification; phosphorothioate linkage;
KW DNA repair; DNA alteration; environmental tolerance; hygromycin-B;
KW abiotic stress tolerance; improved nutritional value; hygromycin; primer;
KW amino acid over production; herbicide resistance; glyphosate resistance;
KW imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
KW porphyric herbicide resistance; triazine resistance; disease resistance;
KW modified oil production; modified starch production; waxy starch;
KW altered floral morphology; male-sterile plant; albino mutant;
KW modified fatty acid content; reduced palmitate production; albino plant;
KW increased stearate production, reduced linolenic acid production;
KW photosynthetic process.
XX
OS Lycopersicon esculentum.
OS Synthetic.
XX
PN WO200192512-A2.

```
XX
PD   06-DEC-2001
XX
PF   01-JUN-2001; 2001WO-US17672
XX
PR   01-JUN-2000; 2000US-208538P
PR   30-OCT-2000; 2000US-244989P
PR   27-MAR-2001; 2001US-0818875.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC,  Kim J;
XX
DR   WPI; 2002-106307/14.
XX
PT   New oligonucleotides with modified nuclease-resistant termini, useful
PT   for creating plants with desired phenotypes, e.g. stress tolerance,
PT   improved nutritional value, herbicide or disease resistance, or
PT   modified oil production -
XX
PS   Claim 7; Page 116; 220pp; English
XX
CC   The invention relates to an oligonucleotide for targeted alteration of a
CC   genetic sequence, which comprises a single-stranded oligonucleotide
CC   having a DNA domain. The DNA domain has at least one mismatch with
CC   respect to the genetic sequence to be altered and further comprises
CC   chemical modifications of the oligonucleotide. The chemical modifications
CC   consist of o-methyl modification, an LNA modification, two or more
CC   phosphorothioate linkages on a terminus, or a combination of any two or
CC   more of these modifications. The oligonucleotides are useful for
CC   directing repair or alteration of plant genetic information. The
CC   oligonucleotides are particularly useful for creating plants with desired
CC   phenotypes, e.g. environmental or abiotic stress tolerance, improved
CC   nutritional value (e.g. altering amino acid content of plants or
CC   conferring amino acid over production), herbicide resistance (e.g.
CC   glyphosate resistance, imidazolinone and sulphonylurea herbicide
CC   resistance, porphyric herbicide resistance or triazine resistance),
CC   disease resistance, modified oil production, modified starch production
CC   (e.g. increased starch or production of waxy starch), altered floral
CC   morphology (e.g. male-sterile plants) or modified fatty acid content
CC   (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
CC   The oligonucleotides are also useful for producing albino mutants for the
CC   analysis of photosynthetic processes. This sequence represents a genome
CC   altering oligonucleotide of the invention.
XX
SQ   Sequence 121 BP; 31 A; 21 C; 26 G; 43 T; 0 other;

Alignment Scores:
Pred. No.:                142             Length:          121
Score:                    28.00           Matches:         5
Percent Similarity:       100.00%         Conservative.    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       24              Gaps:            0

US-09-856-070-26 (1-5) x ABK25861 (1-121)

Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||
Db      66 CAAGACTATGAAGAA 52

RESULT 8
ABK25862
ID   ABK25862 standard; DNA; 121 BP.
XX
AC   ABK25862;
XX
DT   09-APR-2002  (first entry)
XX
DE   Albino plant producing genome altering oligonucleotide #34.
XX
KW   Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss;
KW   o-methyl modification; LNA modification; phosphorothioate linkage;
KW   DNA repair; DNA alteration, environmental tolerance; hygromycin-B;
KW   abiotic stress tolerance; improved nutritional value; hygromycin; primer;
KW   amino acid over production; herbicide resistance; glyphosate resistance;
KW   imidazolinone herbicide resistance; sulphonylurea herbicide resistance;
KW   porphyric herbicide resistance; triazine resistance; disease resistance;
KW   modified oil production; modified starch production; waxy starch;
KW   altered floral morphology; male sterile plant; albino mutant;
KW   modified fatty acid content, reduced palmitate production; albino plant;
KW   increased stearate production; reduced linolenic acid production;
KW   photosynthetic process.
XX
OS   Lycopersicon esculentum.
OS   Synthetic.
XX
PN   WO200192512-A2.
XX
PD   06-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-US17672.
XX
PR   01-JUN-2000; 2000US-208538P.
PR   30-OCT-2000; 2000US-244989P.
PR   27-MAR-2001; 2001US-0818875.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC,  Kim J;
XX
DR   WPI; 2002-106307/14.
XX
PT   New oligonucleotides with modified nuclease-resistant termini, useful
PT   for creating plants with desired phenotypes, e.g. stress tolerance,
PT   improved nutritional value, herbicide or disease resistance, or
PT   modified oil production -
XX
PS   Claim 7, Page 116, 220pp; English.
XX
CC   The invention relates to an oligonucleotide for targeted alteration of a
CC   genetic sequence, which comprises a single-stranded oligonucleotide
CC   having a DNA domain. The DNA domain has at least one mismatch with
CC   respect to the genetic sequence to be altered and further comprises
CC   chemical modifications of the oligonucleotide. The chemical modifications
CC   consist of o-methyl modification, an LNA modification, two or more
CC   phosphorothioate linkages on a terminus, or a combination of any two or
CC   more of these modifications. The oligonucleotides are useful for
CC   directing repair or alteration of plant genetic information. The
CC   oligonucleotides are particularly useful for creating plants with desired
CC   phenotypes, e.g. environmental or abiotic stress tolerance, improved
CC   nutritional value (e.g. altering amino acid content of plants or
CC   conferring amino acid over production), herbicide resistance (e.g.
CC   glyphosate resistance, imidazolinone and sulphonylurea herbicide
CC   resistance, porphyric herbicide resistance or triazine resistance),
CC   disease resistance, modified oil production, modified starch production
CC   (e.g. increased starch or production of waxy starch), altered floral
CC   morphology (e.g. male-sterile plants) or modified fatty acid content
CC   (e.g. reduced palmitate, increased stearate or reduced linolenic acid).
CC   The oligonucleotides are also useful for producing albino mutants for the
CC   analysis of photosynthetic processes. This sequence represents a genome
CC   altering oligonucleotide of the invention.
XX
SQ   Sequence 121 BP; 43 A; 26 C; 21 G; 31 T; 0 other;

Alignment Scores:
Pred. No.:                142             Length:          121
Score:                    28.00           Matches:         5
Percent Similarity:       100.00%         Conservative:    0
Best Local Similarity:    100.00%         Mismatches:      0
Query Match:              100.00%         Indels:          0
DB:                       24              Gaps:            0

US-09-856-070-26 (1-5) x ABK25862 (1-121)

Qy       1 GlnAspTyrGluGlu 5
```

```
          ||||||||||||||||
Db      56 CAAGACTATGAAGAA 70

RESULT 9
AAK50420/c
ID   AAK50420 standard; DNA; 133 BP.
XX
AC   AAK50420;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human bone marrow expressed single exon probe SEQ ID NO: 24977.
XX
KW   Human; bone marrow expressed exon; gene expression analysis; probe;
KW   microarray; cancer; leukaemia; lymphoma; myeloma; ss.
XX
OS   Homo sapiens.
XX
PN   WO200157276 A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US00668.
XX
PR   04-FEB-2000; 2000US-0180312.
PR   26-MAY-2000; 2000US-0207456.
PR   30-JUN-2000; 2000US-0608408.
PR   03-AUG-2000; 2000US-0632366.
PR   21-SEP-2000; 2000US-0234687.
PR   27-SEP-2000; 2000US-0236359.
PR   04-OCT-2000; 2000GB-0024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for
PT   analyzing gene expression in human bone marrow -
XX
PS   Example 4; SEQ ID NO: 24977; 658pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is one of
CC   the probes of the invention.
XX
SQ   Sequence 133 BP; 28 A; 33 C; 17 G; 55 T; 0 other;

Alignment Scores:
Pred. No.:                157             Length:         133
Score:                    28.00           Matches:        5
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       22              Gaps:           0

US-09-856-070-26 (1-5) x AAK50420 (1-133)

Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||||
Db      59 CAGGATTATGAAGAA 45

RESULT 10
ABA06312/c
ID   ABA06312 standard; DNA; 160 BP.
XX
AC   ABA06312;
XX
DT   15-JAN-2002  (first entry)
XX
DE   Soy bean SCN/SCS resistance related polynucleotide SEQ ID NO 90.
XX
KW   Soy bean; soybean cyst nematode; soybean sudden death syndrome; SCN/SDS;
KW   transgenic plant; Heterodera glycines; Fusarium solani; ds.
XX
OS   Glycine max.
XX
PN   CA2331674-A1.
XX
PD   28-JUL-2001.
XX
PF   29-JAN-2001; 2001CA-2331674.
XX
PR   28-JAN-2000; 2000US-0178811.
XX
PA   (UYSI-) UNIV SOUTHERN ILLINOIS.
XX
PI   Lightfoot DA,  Meksem K;
XX
DR   WPI; 2001-590306/67.
XX
PT   Novel genetic marker associated with soybean cyst nematode or soybean
PT   sudden death syndrome resistance in soybeans, used to produce resistant
PT   cell lines and plants -
XX
PS   Disclosure; Page 183; 247pp; English.
XX
CC   The invention relates to genetic markers (ABA06224-ABA06344) associated
CC   with soybean cyst nematode/soybean sudden death syndrome (SCN/SDS)
CC   resistance in soybeans. The genetic markers provide for methods of
CC   detecting SCN/SDS, for development of transgenic plant lines resistant to
CC   SCN/SDS, especially the SCN Heterodera glycines but also Fusarium solani
CC   and isolation of new genes and polypeptides able to provide resistance to
CC   H. glycines and F. solani and substances which regulate the expression of
CC   these genes.
XX
SQ   Sequence 160 BP; 43 A; 37 C; 32 G; 48 T; 0 other;

Alignment Scores:
Pred. No.:                190             Length:         160
Score:                    28.00           Matches:        5
Percent Similarity:       100.00%         Conservative:   0
Best Local Similarity:    100.00%         Mismatches:     0
Query Match:              100.00%         Indels:         0
DB:                       22              Gaps:           0

US-09-856-070-26 (1-5) x ABA06312 (1-160)

Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||||
Db     123 CAGGACTACGAGGAG 109

RESULT 11
AAF10649
ID   AAF10649 standard; cDNA; 288 BP.
XX
AC   AAF10649;
XX
DT   13-MAR-2001  (first entry)
XX
DE   Fusarium venenatum EST SEQ ID NO:3172.
XX
KW   Multiple gene expression; filamentous fungal cell; EST;
KW   expressed sequence tag; Fusarium venenatum; Aspergillus niger;
KW   Aspergillus oryzae; Trichoderma reesei; identification; recombination;
KW   culture condition; environmental stress; spore morphogenesis;
KW   metabolic pathway engineering; catabolic pathway engineering; ss.
XX
OS   Fusarium venenatum.
XX
PN   WO200056762-A2.
XX
```

PD 28-SEP-2000.
XX
PF 22-MAR-2000; 2000WO-US07781
XX
PR 22-MAR-1999; 99US-0273623
XX
PA (NOVO) NOVO NORDISK BIOTECH INC.
PA (NOVO) NOVO NORDISK AS.
XX
PI Berka RM, Rey MW, Shuster JR, Kauppinen S, Clausen IG, Olsen PB;
XX
DR WPI; 2000-594572/56.
XX
PT Monitoring differential expression of genes in filamentous fungal cells
PT uses fluorescence-labeled nucleic acids isolated from the cells and a
PT substrate of expressed sequence tags -
XX
PS Claim 86; Page 1511; 3161pp; English
XX
CC The present invention describes a method for monitoring differential
CC expression of genes in a first filamentous fungal (FF) cell relative to
CC expression of the same genes in one or more second filamentous fungal
CC cells. The method uses fluorescence-labeled nucleic acids isolated from
CC the FF cells and a substrate of expressed sequence tags (EST). The ESTs
CC are used in the methods for monitoring differential expression of genes
CC in a first filamentous fungal (FF) cell relative to expression of the
CC same genes in one or more second filamentous fungal cells. Monitoring
CC the global expression of genes from FF cells allows the production
CC potential of the microorganisms to be improved. New genes may be
CC discovered, possible functions of unknown open reading frames can be
CC identified and gene copy number variation and stability can be
CC monitored. The expression of genes can be used to study how FF cells
CC adapt to changes in culture conditions, environmental stress, spore
CC morphogenesis, recombination, metabolic or catabolic pathway
CC engineering. Using ESTs provides several advantages over genomic or
CC random cDNA clones including elimination of redundancy as one spot on an
CC array equals one gene or open reading frame, and organisation of the
CC microarrays based on function of the gene products to facilitate
CC analysis of the results. AAF07478 to AAF11247 represents ESTs from
CC Fusarium venenatum; AAF11248 to AAF11853 represents ESTs from Aspergillus
CC niger; AAF11854 to AAF14878 represents ESTs from Aspergillus oryzae; and
CC AAF14879 to AAF15337 represents ESTs from Trichoderma reesei, which are
CC all specifically claimed in the present invention.
XX
SQ Sequence 288 BP; 88 A; 49 C; 79 G; 70 T; 2 other;

Alignment Scores:

Pred. No.:	346	Length:	288
Score:	28.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	22	Gaps:	0

US-09-856-070-26 (1-5) x AAF10949 (1-288)

```
Qy       1 GlnAspTyrGluGln 5
           ||||||||||||||||
Db       4 CAAGATTACGAAGAA 18
```

RESULT 12
AAX98493
ID AAX98493 standard; cDNA; 300 BP.
XX
AC AAX98493;
XX
DT 24-SEP-1999 (first entry)
XX
DE Human cancer cell derived cDNA #219.
XX
KW Cancer; human; colon; breast; lung; transmembrane receptor; ATPase;
KW integral membrane protein; aspartyl protease; GATA family; wnt family;
KW transcription factor, G-protein alpha subunit, protein phosphatase;
KW phorbolester binding protein, diacylglycerol binding protein; trypsin;
KW protein kinase, tyrosine phosphatase, developmental signalling protein;
KW WW/rsp5/WWP domain, therapy, forensic, genetic mapping; diagnostic;
KW detection; treatment; cervical; melanoma; colorectal adenocarcinoma;
KW Wilm's tumour, retinoblastoma; sarcoma, myosarcoma, lung carcinoma;
KW leukemia; lymphoma; dysplasia; hyperplasia; endometrium; adrenal;
KW prostate; ss.
XX
OS Homo sapiens.
XX
PN WO9933982-A2.
XX
PD 08-JUL-1999.
XX
PF 22-DEC-1998; 98WO-US27610.
XX
PR 21-DEC-1998; 98US-0217471
PR 23-DEC-1997; 97US-0068755.
PR 03-APR-1998; 98US-0080664
PR 21-OCT-1998; 98US-0105234.
PR 27-OCT-1998; 98US-0105877.
XX
PA (CHIR) CHIRON CORP.
PA (HYSE-) HYSEQ INC.
XX
PI Cikvenjakov R, Dickson M, Drmanac R, Drmanac S;
PI Escobedo J, Garcia PD, Garcia V, Giese K, Innis MA;
PI Jones LW, Kassam A, Kennedy GC, Kita D, Labat I;
PI Lamson G, Leshkowitz D, Pot D, Randazzo F, Reinhard C;
PI Stache-Crain B, Sudduth-Klinger J, Williams LT;
XX
DR WPI; 1999-449243/36.
XX
PT New isolated human polynucleotides
XX
PS Claim 1; Page 370; 591pp; English.
XX
CC This invention describes novel isolated human polynucleotides obtained
CC by screening for differential expression in colon cancer, breast cancer
CC and lung cancer cell lines. The polynucleotides of the invention are
CC represented in AAX98275-X99118 and encode polypeptides of protein
CC families selected from 4 transmembrane segments integral membrane
CC proteins, 7 transmembrane receptors, ATPases associated with various
CC cellular activities (AAA), eukaryotic aspartyl proteases, GATA family of
CC transcription factors, G protein alpha subunit, phorbolesters or
CC diacylglycerol binding proteins, protein kinase, protein phosphatase 2C,
CC protein tyrosine phosphatase, trypsin, wnt family of developmental
CC signalling proteins and WW/rsp5/WWP domain containing proteins. The
CC encoded polypeptides also have a functional domain selected from Ank
CC repeat, basic region plus leucine zipper transcription factors,
CC bromodomain, EF-hand, SH3 domain, WD domain/G-beta repeats, zinc finger
CC (C2H2 type), zinc finger (CCHC class), and zinc-binding metalloprotease
CC domain. The polynucleotides encode polypeptides with similarity to known
CC protein families and are predicted to have similar properties. The novel
CC polynucleotides can be used to develop products for use as therapeutic
CC agents and in forensics, genetic analysis, mapping and diagnostic
CC applications. In particular, the product can be used for the detection
CC and management of cancers. They can be used for treating e.g. cervical
CC cancers, melanomas, colorectal adenocarcinomas, Wilm's tumour, sarcomas,
CC retinoblastoma, myosarcomas, lung carcinomas, leukemias, such as chronic
CC myelogenous leukemia, promyelocytic leukemia, monocytic leukemia, and
CC myeloid leukemia, and lymphomas such as histiocytic lymphoma, anhydric
CC hereditary ectodermal dysplasia, congenital alveolar dysplasia,
CC epithelial dysplasia of the cervix, fibrous dysplasia of bone, and
CC mammary dysplasia, hyperplasias, e.g. endometrial, adrenal, breast,
CC prostate or thyroid hyperplasias or pseudoepitheliomatous hyperplasia of
CC the skin.
XX
SQ Sequence 300 BP; 113 A; 55 C; 76 G; 56 T; 0 other;

Alignment Scores:

Pred. No.:	361	Length:	300
Score:	28.00	Matches:	5

```
Percent Similarity:     100.00%         Conservative:   0
Best Local Similarity:  100.00%         Mismatches:     0
Query Match:            100.00%         Indels:         0
DB:                     20              Gaps:           0

US-09-856-070-26 (1-5) x AAX98493 (1-300)

Qy       1 GlnAspTyrGluGlu 5
           |||||||||||||||||
Db     157 CAGGATTATGAAGAA 171

RESULT 13
AAK66441
ID   AAK66441 standard; DNA; 301 BP
XX
AC   AAK66441;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:21253
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01354
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215145.
PR   07-JUL-2000; 2000US-0216647.
PR   07-JUL-2000; 2000US-0216880.
PR   11-JUL-2000; 2000US-0217487.
PR   11-JUL-2000; 2000US-0217496.
PR   14-JUL-2000; 2000US-0218290.
PR   26-JUL-2000; 2000US-0220963.
PR   26-JUL-2000; 2000US-0220964.
PR   14-AUG-2000; 2000US-0224518.
PR   14-AUG-2000; 2000US-0224519.
PR   14-AUG-2000; 2000US-0225213.
PR   14-AUG-2000; 2000US-0225214.
PR   14-AUG-2000; 2000US-0225266.
PR   14-AUG-2000; 2000US-0225267.
PR   14-AUG-2000; 2000US-0225268.
PR   14-AUG-2000; 2000US-0225270.
PR   14-AUG-2000; 2000US-0225447.
PR   14-AUG-2000; 2000US-0225757.
PR   14-AUG-2000; 2000US-0225758.
PR   14-AUG-2000; 2000US-0225759.
PR   18-AUG-2000; 2000US-0226279.
PR   22-AUG-2000; 2000US-0226681.
PR   22-AUG-2000; 2000US-0226868.
PR   22-AUG-2000; 2000US-0227192.
PR   23-AUG-2000; 2000US-0227009.
PR   30-AUG-2000; 2000US-0228424.
PR   01-SEP-2000; 2000US-0229287.
PR   01-SEP-2000; 2000US-0229343.
PR   01-SEP-2000; 2000US-0229344.
PR   01-SEP-2000; 2000US-0229345.
PR   05-SEP-2000; 2000US-0229509.
PR   05-SEP-2000; 2000US-0229513.
PR   06-SEP-2000; 2000US-0230437.
PR   06-SEP-2000; 2000US-0230438.
PR   08-SEP-2000; 2000US-0231242.
PR   08-SEP-2000; 2000US-0231243.
PR   08-SEP-2000; 2000US-0231244.
PR   08-SEP-2000; 2000US-0231413.
PR   08-SEP-2000; 2000US-0231414.
PR   08-SEP-2000; 2000US-0232080.
PR   08-SEP-2000; 2000US-0232081.
PR   12-SEP-2000; 2000US-0231968.
PR   14-SEP-2000; 2000US-0232397.
PR   14-SEP-2000; 2000US-0232398.
PR   14-SEP-2000; 2000US-0232399.
PR   14-SEP-2000; 2000US-0232400.
PR   14-SEP-2000; 2000US-0232401.
PR   14-SEP-2000; 2000US-0233063.
PR   14-SEP-2000; 2000US-0233064.
PR   14-SEP-2000; 2000US-0233065.
PR   21-SEP-2000; 2000US-0234223.
PR   21-SEP-2000; 2000US-0234274.
PR   25-SEP-2000; 2000US-0234997.
PR   25-SEP-2000; 2000US-0234998.
PR   26-SEP-2000; 2000US-0235484.
PR   27-SEP-2000; 2000US-0235834.
PR   27-SEP-2000; 2000US-0235836.
PR   29-SEP-2000; 2000US-0236327.
PR   29-SEP-2000; 2000US-0236367.
PR   29-SEP-2000; 2000US-0236368.
PR   29-SEP-2000; 2000US-0236369.
PR   29-SEP-2000; 2000US-0236370.
PR   02-OCT-2000; 2000US-0236802.
PR   02-OCT-2000; 2000US-0237037.
PR   02-OCT-2000; 2000US-0237038.
PR   02-OCT-2000; 2000US-0237039.
PR   02-OCT-2000; 2000US-0237040.
PR   13-OCT-2000; 2000US-0239935.
PR   13-OCT-2000; 2000US-0239937.
PR   20-OCT-2000; 2000US-0240960.
PR   20-OCT-2000; 2000US-0241221.
PR   20-OCT-2000; 2000US-0241785.
PR   20-OCT-2000; 2000US-0241786.
PR   20-OCT-2000; 2000US-0241787.
PR   20-OCT-2000; 2000US-0241808.
PR   20-OCT-2000; 2000US-0241809.
PR   20-OCT-2000; 2000US-0241826.
PR   01-NOV-2000; 2000US-0244617.
PR   08-NOV-2000; 2000US-0246474.
PR   08-NOV-2000; 2000US-0246475.
PR   08-NOV-2000; 2000US-0246476.
PR   08-NOV-2000; 2000US-0246477.
PR   08-NOV-2000; 2000US-0246478.
PR   08-NOV-2000; 2000US-0246523.
PR   08-NOV-2000; 2000US-0246524.
PR   08-NOV-2000; 2000US-0246525.
PR   08-NOV-2000; 2000US-0246526.
PR   08-NOV-2000; 2000US-0246527.
PR   08-NOV-2000; 2000US-0246528.
PR   08-NOV-2000; 2000US-0246532.
PR   08-NOV-2000; 2000US-0246609.
PR   08-NOV-2000; 2000US-0246610.
PR   08-NOV-2000; 2000US-0246611.
PR   08-NOV-2000; 2000US-0246613.
PR   17-NOV-2000; 2000US-0249207.
PR   17-NOV-2000; 2000US-0249208.
PR   17-NOV-2000; 2000US-0249209.
PR   17-NOV-2000; 2000US-0249210.
PR   17-NOV-2000; 2000US-0249211.
PR   17-NOV-2000; 2000US-0249212.
PR   17-NOV-2000; 2000US-0249213.
PR   17-NOV-2000; 2000US-0249214.
PR   17-NOV-2000; 2000US-0249215.
PR   17-NOV-2000; 2000US-0249216.
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PR   17-NOV-2000; 2000US-0249217.
PR   17-NOV-2000; 2000US-0249218.
PR   17-NOV-2000; 2000US-0249244.
PR   17-NOV-2000; 2000US-0249245.
PR   17-NOV-2000; 2000US-0249264.
PR   17-NOV-2000; 2000US-0249265.
PR   17-NOV-2000; 2000US-0249297.
PR   17-NOV-2000; 2000US-0249299.
PR   17-NOV-2000; 2000US-0249300.
PR   01-DEC-2000; 2000US-0250180.
PR   01-DEC-2000; 2000US-0250391.
PR   05-DEC-2000; 2000US-0251040.
PR   05-DEC-2000; 2000US-0251988.
PR   05-DEC-2000; 2000US-0256719.
PR   06-DEC-2000; 2000US-0251479.
PR   08-DEC-2000; 2000US-0251856.
PR   08-DEC-2000; 2000US-0251868.
PR   08-DEC-2000; 2000US-0251869.
PR   08-DEC-2000; 2000US-0251989.
PR   08-DEC-2000; 2000US-0251990.
PR   11-DEC-2000; 2000US-0254007.
PR   05-JAN-2001; 2001US-0259678.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-463426/52.
XX
PT   Nucleic acids encoding human immune/haematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and
PT   metastasis -
XX
PS   Disclosure; SEQ ID NO 21253; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting
CC   the nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention.
XX
SQ   Sequence 301 BP; 68 A; 94 C; 71 G; 68 T; 0 other;

Alignment Scores:
Pred. No.:              362          Length:          301
Score:                  28.00        Matches:         5
Percent Similarity:     100.00%      Conservative:    0
Best Local Similarity:  100.00%      Mismatches:      0
Query Match:            100.00%      Indels:          0
DB:                     22           Gaps:            0

US-09-856-070-26 (1-5) x AAK66441 (1-301)

Qy       1 GlnAspTyrGlnGlu 5
           |||||||||||||||
Db      57 CAGGACTATGAAGAG 71

RESULT 14
AAK55628
ID   AAK55628 standard; cDNA; 328 BP.
XX
AC   AAK55628;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen encoding cDNA SEQ ID NO:688.
XX
KW   Human, immune, haematopoietic, immune/haematopoietic antigen; cancer;
KW   cytostatic, gene therapy, vaccine, metastasis, ss.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US01354.
XX
PR   31-JAN-2000; 2000US-0179065.
PR   04-FEB-2000; 2000US-0180628.
PR   24-FEB-2000; 2000US-0184664.
PR   02-MAR-2000; 2000US-0186350.
PR   16-MAR-2000; 2000US-0189874.
PR   17-MAR-2000; 2000US-0190076.
PR   18-APR-2000; 2000US-0198123.
PR   19-MAY-2000; 2000US-0205515.
PR   07-JUN-2000; 2000US-0209467.
PR   28-JUN-2000; 2000US-0214886.
PR   30-JUN-2000; 2000US-0215135.
PR   07-JUL-2000; 2000US-0216647.
PR   07-JUL-2000; 2000US-0216880.
PR   11-JUL-2000; 2000US-0217487.
PR   11-JUL-2000; 2000US-0217496.
PR   14-JUL-2000; 2000US-0218290.
PR   26-JUL-2000; 2000US-0220963.
PR   26-JUL-2000; 2000US-0220964.
PR   14-AUG-2000; 2000US-0224518.
PR   14-AUG-2000; 2000US-0224519.
PR   14-AUG-2000; 2000US-0225213.
PR   14-AUG-2000; 2000US-0225214.
PR   14-AUG-2000; 2000US-0225266.
PR   14-AUG-2000; 2000US-0225267.
PR   14-AUG-2000; 2000US-0225268.
PR   14-AUG-2000; 2000US-0225270.
PR   11-AUG-2000; 2000US-0225447.
PR   14-AUG-2000; 2000US-0225757.
PR   14-AUG-2000; 2000US-0225758.
PR   14-AUG-2000; 2000US-0225759.
PR   18-AUG-2000; 2000US-0226279.
PR   22-AUG-2000; 2000US-0226681.
PR   22-AUG-2000; 2000US-0226868.
PR   22-AUG-2000; 2000US-0227182.
PR   23-AUG-2000; 2000US-0227699.
PR   30-AUG-2000; 2000US-0228924.
PR   01-SEP-2000; 2000US-0229287.
PR   01-SEP-2000; 2000US-0229343.
PR   01-SEP-2000; 2000US-0229344.
PR   01-SEP-2000; 2000US-0229345.
PR   05-SEP-2000; 2000US-0229509.
PR   05-SEP-2000; 2000US-0229513.
PR   06-SEP-2000; 2000US-0230437.
PR   06-SEP-2000; 2000US-0230438.
PR   08-SEP-2000; 2000US-0231242.
PR   08-SEP-2000; 2000US-0231243.
PR   08-SEP-2000; 2000US-0231244.
PR   08-SEP-2000; 2000US-0231413.
PR   08-SEP-2000; 2000US-0231414.
PR   08-SEP-2000; 2000US-0232080.
PR   08-SEP-2000; 2000US-0232081.
PR   12-SEP-2000; 2000US-0231968.
PR   14-SEP-2000; 2000US-0232397.
PR   14-SEP-2000; 2000US-0232398.
PR   14-SEP-2000; 2000US-0232399.
PR   14-SEP-2000; 2000US-0232400.
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PR 14-SEP-2000; 2000US-0232491.
PR 14-SEP-2000; 2000US-0233063.
PR 14-SEP-2000; 2000US-0233064.
PR 14-SEP-2000; 2000US-0233065.
PR 21-SEP-2000; 2000US-0234223.
PR 21-SEP-2000; 2000US-0234274.
PR 25-SEP-2000; 2000US-0234997.
PR 25-SEP-2000; 2000US-0234998.
PR 26-SEP-2000; 2000US-0235484.
PR 27-SEP-2000; 2000US-0235834.
PR 27-SEP-2000; 2000US-0235836.
PR 29-SEP-2000; 2000US-0236327.
PR 29-SEP-2000; 2000US-0236367.
PR 29-SEP-2000; 2000US-0236368.
PR 29-SEP-2000; 2000US-0236369.
PR 29-SEP-2000; 2000US-0236370.
PR 02-OCT-2000; 2000US-0236802.
PR 02-OCT-2000; 2000US-0237037.
PR 02-OCT-2000; 2000US-0237038.
PR 02-OCT-2000; 2000US-0237039.
PR 02-OCT-2000; 2000US-0237040.
PR 13-OCT-2000; 2000US-0239935.
PR 13-OCT-2000; 2000US-0239937.
PR 20-OCT-2000; 2000US-0240960.
PR 20-OCT-2000; 2000US-0241221.
PR 20-OCT-2000; 2000US-0241785.
PR 20-OCT-2000; 2000US-0241786.
PR 20-OCT-2000; 2000US-0241787.
PR 20-OCT-2000; 2000US-0241808.
PR 20-OCT-2000; 2000US-0241809.
PR 20-OCT-2000; 2000US-0241826.
PR 01-NOV-2000; 2000US-0244617.
PR 08-NOV-2000; 2000US-0246474.
PR 08-NOV-2000; 2000US-0246475.
PR 08-NOV-2000; 2000US-0246476.
PR 08-NOV-2000; 2000US-0246477.
PR 08-NOV-2000; 2000US-0246478.
PR 08-NOV-2000; 2000US-0246523.
PR 08-NOV-2000; 2000US-0246524.
PR 08-NOV-2000; 2000US-0246525.
PR 08-NOV-2000; 2000US-0246526.
PR 08-NOV-2000; 2000US-0246527.
PR 08-NOV-2000; 2000US-0246528.
PR 08-NOV-2000; 2000US-0246532.
PR 08-NOV-2000; 2000US-0246609.
PR 08-NOV-2000; 2000US-0246610.
PR 08-NOV-2000; 2000US-0246611.
PR 08-NOV-2000; 2000US-0246613.
PR 17-NOV-2000; 2000US-0249207.
PR 17-NOV-2000; 2000US-0249208.
PR 17-NOV-2000; 2000US-0249209.
PR 17-NOV-2000; 2000US-0249210.
PR 17-NOV-2000; 2000US-0249211.
PR 17-NOV-2000; 2000US-0249212.
PR 17-NOV-2000; 2000US-0249213.
PR 17-NOV-2000; 2000US-0249214.
PR 17-NOV-2000; 2000US-0249215.
PR 17-NOV-2000; 2000US-0249216.
PR 17-NOV-2000; 2000US-0249217.
PR 17-NOV-2000; 2000US-0249218.
PR 17-NOV-2000; 2000US-0249244.
PR 17-NOV-2000; 2000US-0249245.
PR 17-NOV-2000; 2000US-0249264.
PR 17-NOV-2000; 2000US-0249265.
PR 17-NOV-2000; 2000US-0249297.
PR 17-NOV-2000; 2000US-0249299.
PR 17-NOV-2000; 2000US-0249300.
PR 01-DEC-2000; 2000US-0250160.
PR 01-DEC-2000; 2000US-0250391.
PR 05-DEC-2000; 2000US-0251030.
PR 05-DEC-2000; 2000US-0251988.
PR 05-DEC-2000; 2000US-0256719.
PR 06-DEC-2000; 2000US-0251479.
PR 08-DEC-2000; 2000US-0251856.
PR 08-DEC-2000; 2000US-0251868.
PR 08-DEC-2000; 2000US-0251869.
PR 08-DEC-2000; 2000US-0251989.
PR 08-DEC-2000; 2000US-0251990.
PR 11-DEC-2000; 2000US-0254097.
PR 05-JAN-2001; 2001US-0259678.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483429/52.
DR P-PSDB; AAM82847.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and
PT metastasis -
XX
PS Claim 1; SEQ ID NO 688; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting
CC the nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic related diseases, especially
CC cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC to AAK87694 represent human immune/haematopoietic antigen genomic
CC sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC represent sequences used in the exemplification of the present invention.
XX
SQ Sequence 328 BP; 75 A; 98 C; 81 G; 71 T; 3 other;

Alignment Scores:

Pred. No.:	395	Length:	328
Score:	28.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	22	Gaps:	0

US-09-856-070-26 (1-5) x AAK55628 (1-328)

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Qy       1 GlnAspTyrGluGlu 5
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Db      63 CAGGACTATGAAGAG 77
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RESULT 15
ABN19502/c
ID ABN19502 standard; cDNA; 372 BP.
XX
AC ABN19502;
XX
DT 24-JUN-2002 (first entry)
XX
DE Human ORFX polynucleotide sequence SEQ ID NO:7481.
XX
KW Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis;
KW hyperproliferative disorder; psoriasis; benign tumour; haemorrhage;
KW degenerative disorder; osteoarthritis; neurodegenerative disorder;
KW cardiovascular disease; diabetes mellitus; systemic lupus erythematosus;
KW hypertension; hypothyroidism; cholesterol ester storage disease;
KW immune deficiency; immune disorder; infectious disease;
KW autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis;
KW myasthenia gravis; gene; ss.

XX
OS Homo sapiens.
XX
PN WO200192523-A2.
XX
PD 06-DEC-2001.
XX
PF 29-MAY-2001; 2001WO-US10836.
XX
PR 30-MAY-2000; 2000US-206122P.
PR 29-AUG-2000; 2000US-228716P.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach MD;
XX
DR WPI; 2002-106308/14.
DR P-PSDB; ABP03750.
XX
PT Novel human polypeptides and polynucleotides useful for diagnosing,
PT preventing and treating cardiovascular disease, neurodegenerative,
PT hyperproliferative disorders and autoimmune disorders -
XX
PS Disclosure; SEQ ID 7481; 1037pp; English.
XX
CC The present invention describes substantially purified human proteins
CC (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1
CC in the specification). ABN15762 to ABN27252 encode the human ORFX
CC proteins given in ABP00010 to ABP11500. ORFX proteins are useful for
CC treating or preventing a pathology associated with an ORFX-associated
CC disorder in humans, and in the manufacture of a medicament for treating a
CC syndrome associated with ORFX-associated disorder. ORFX polynucleotide
CC sequences can be used in gene therapy. ORFX sequences can be used in the
CC treatment of cancer, hyperproliferative disorders, cirrhosis of liver,
CC psoriasis, benign tumours, keloid, degenerative disorders, haemorrhage,
CC osteoarthritis, neurodegenerative disorders, disorders related to organ
CC transplantation, cardiovascular diseases, diabetes mellitus, systemic
CC lupus erythematosus, hypertension, hypothyroidism, cholesterol ester
CC storage disease, various immune deficiencies and disorders, infectious
CC diseases, autoimmune disorders such as multiple sclerosis, rheumatoid
CC arthritis, autoimmune thyroiditis, myasthenia gravis, graft-versus-host
CC disease and autoimmune inflammatory eye disease. ORFX proteins are also
CC useful for treating burns, incisions, ulcers, for treating osteoporosis,
CC bone degenerative disorders, or periodontal disease, and for gut
CC protection or regeneration and treatment of lung or liver fibrosis,
CC reperfusion injury in various tissues and conditions resulting from
CC systemic cytokine damage.
CC N.B. The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 372 BP; 73 A; 125 C; 113 G; 59 T; 2 other;

Alignment Scores:

Pred. No.:	450	Length:	372
Score:	28.00	Matches:	5
Percent Similarity:	100.00%	Conservative:	0
Best Local Similarity:	100.00%	Mismatches:	0
Query Match:	100.00%	Indels:	0
DB:	24	Gaps:	0

US-09-856-070-26 (1-5) x ABN19502 (1-372)

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Qy       1 GlnAsplyrGluGlu 5
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Db      84 CAGGACTACGAGGAA 70
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Search completed: January 16, 2003, 17:19:53
Job time : 82.9821 secs